Assignment 1

Question	Design	Study Type	Critical for the Study Type	Data Sources
Is Germany a cold country?	We collect data from people that live in Germany who have visited other countries and check their opinion.	Observational.	We cannot modify the opinion of the people.	Start a poll on social networks to let the people decide.
Do the majority of people drink while they eat in fast food restaurants?	We will collect data from the orders at fast food restaurants	Observational	We cannot modify the preferences of the people.	Orders from fast food restaurants
What if working out with an empty stomach is better exercise?	We will have two groups, one will work out with an empty stomach, one will not. We will then compare the results.	Experimental	We want to see the results of the average result of a randomly assigned group, not individuals. By having the average, we can consider which solution is better for the average people.	No Data Source
What if drinking decaf coffee instead of normal coffee affects your energy?	We will have two groups, one will drink only decaf coffee every day for a month, one will drink normal coffee. We will then compare the results.	Experimental	We want to see if decaf coffee offers the same results as normal coffee for an average person. This can only happen if we see how the group's result happens and not one person's result.	No Data Source